REMARKS/ARGUMENTS

Applicant's attorney would like to thank the Examiner for allowing claims 7, 16 and 25, if re-written in independent format.

Claim Rejections- Under 35 U.S.C. 103(a)

Claims 1-6, 8-15, 17-24 and 26-27 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Arnold et al. (U.S. patent 4,922,915) in view of Syracuse et al (U.S. patent 5, 781,225). Applicant respectfully disagrees.

Claims 1-6, 8-15, 17-24 and 26-27 are directed at detecting "pixel stutter" generated during the scanning and measurement of the attenuation of fluorescing pixels on a microarray sample. Pixel stutter, as defined by the Applicant's specifications is "two or more adjacent pixels with the same intensity value because of scanning or other artifact(s)" that is caused by the inherent limitations of the computer hardware or software (page 3, line 22 and page 4, line 1). Simply put, the problem that is the object of the Applicant's method is that of repeating pixel attenuation signals generated during the scanning of a microarray. This is contrasted with Syracuse et al. which discusses that "image stutter" occurs when a "second scan line has been printed with some overlap of the first scan line and subsequently with the third scan line, the information being projected for the second scan line angularly becomes ambiguously tainted by the first and third scan line information...At areas of the image where edge features are seen, this information will be seen as...a condition called image stutter" (U.S. Patent 5,781,225, column 2, lines 34-40). Simply put, the problem that is the object of the method described in Syracuse et al. is that of poor image quality caused by overlapping adjacent

pixels. It should be readily apparent to a person of ordinary skill in the art that the problem targeted by the method disclosed in Syracuse et al. is entirely different from that claimed in Applicant's invention.

As pointed out by Examiner in the Office Action dated October 22, 2003, Arnold et al. was "silent about pixel stutter" (Application/Control Number: 09/724,751, Detailed Action memo, page 3, line 4). The Arnold et al. reference discusses a method to locate the "centers of the reference sample images and then positions regions of interest (ROIs) totally and reproducibly within the reference sample images" (U.S. Patent 4,922,915, column 6, lines 28-31) to eliminate the issue of "error caused by misplacement of the ROI such that it is not wholly within the portion of the image representing the reference sample" (U.S. Patent 4,922,915, column 5, lines 41-44). It would be apparent to a person of ordinary skill in the art that this is not related to addressing the issue of "pixel stutter" as taught in Applicants' specifications. Additionally, Arnold et al. discusses the use of "histogram analysis of the tissue within an ROI to exclude tissue components that are undesirable in the calculation of tissue density" (U.S. Patent 4,922,915, Abstract). This is a method of ensuring that the calculation of tissue or bone density from the measured pixel intensity on a cross sectional x-ray image is not biased by inhomogeneities of tissue or bone within the ROI. It would be apparent to a person of ordinary skill in the art that this is not related to the issue of "pixel stutter" as taught in Applicants' specifications. Therefore, the references individually or in combination, do not teach, suggest, or motivate our claimed invention.

For the above reasons, the Applicant respectfully submits that the Examiner has failed to establish a *prima facie* case for obviousness over Arnold et al in view of

Syracuse et al. Thus, the Applicant respectfully requests that the rejection of claims 1-6, 8-15, 17-24 and 26-27 for obviousness be withdrawn.

CONCLUSION

For these reasons, Applicants believe all pending claims are now in condition for allowance. If the Examiner has any questions pertaining to this application or feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment to Deposit Account 01-0431.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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